

SUFFOLK COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF SANITATION
ENGINEERING SECTION DESIGN CHECKLIST

I. GENERAL REQUIREMENTS

1. General Plan

- a. north arrow
- b. provide location map
- c. scale = 1":100'
- d. provide a plan index
- e. show and number manholes
- f. show pipe, diameter and direction of flow
- f. show lot #'s, building #'s, etc. matching file map designate any "out parcels" to subdivision as such
- g. show house/building sewer connections
- h. show utility mains
- i. show soil boring/test hole location and groundwater elevation
- j. plan size = 24" x 36"
- k. include SCDPW General Notes and Sewer Marking Tape Notes on plan

2. Sewer Plan & Profile

- a. show general plan requirements, except as otherwise required herein
- b. show plan over profile scale = 1" 40' horizontal, 1":4' vertical; or 1":50', 1":5'
- c. show pipe length, type, class and slope
- d. show stationing of manholes and house/building sewer connections at mainline sewer, stationing to be from downstream to upstream, include match lines where appropriate, and where sheet continuation can be found
- e. show manhole rim and invert elevations in plan & profile
- f. whenever sewer and water intersect each other, provide a table with invert elevation of each
- g. show water services
- h. show both existing and finished grades

II. SPECIFIC REQUIREMENTS – (also see detail sheets, appropriate SCDPW specifications and Ten State Standards)

1. Manholes

- a. minimum diameter is 4.0'; where a internal drop assembly required minimum diameter is 5.0'; must conform to ASTM C478 latest revision
- b. minimum of 0.1' difference between incoming and outgoing pipe inverts.
- c. inverts greater than 2.0' difference, provide a drop assembly; drop pipe diameter = lateral pipe diameter + 2"

- d. provide Type “F” adjustable frame and cover in paved areas, Type “D” Heavy Duty in unpaved area;
 - e. when finished grade is below +5.50 elevation, provide watertight cover and provide an above ground vent assembly when watertight cover is installed on a flush manhole
 - f. Cores on existing manholes must be 1’ above or below joints
2. Pipe
- a. Minimum cover over pipe is 4.0’
 - b. Minimum diameter mainline sewer = 8”, house/building connection = 6”
 - c. Mainline sewer at a depth of over 15’ must be a minimum of DR-18 class.
 - d. Minimum slope for mainline from flush manhole to next manhole is 0.6%
3. House/Building Connection
- a. One connection for each individually owned unit.
 - b. Up to four (4) units per connection for rental apartments only. All units must be on the same floor.
 - e. Provide spur to property line for any “out parcel” which is within subdivision.
 - f. Direct connection to manhole permitted for industrial/commercial connections only.
 - g. Provide an external cleanout assembly located at the face of the building.
4. Force Main (also see pump station guidelines)
- a. Minimum diameter is 4”
 - b. Minimum cover is 4.0’
 - c. Minimum class is DR-18
 - d. Provide a cleanout assembly at 400’ max. intervals and at > 45° change in line
 - e. Provide drain manhole at low points
 - f. Provide air relief chamber at high points
 - g. Provide pipe, fittings and valves in class sufficient to accommodate testing requirements
5. Pump Station (also see pump station design guidelines)
- a. Provide positive site drainage
 - b. Provide pre-fabricated concrete control building by Shelter Technologies, or equal
 - c. All areas within the pump station fence line must be paved.

NOTE: SANITARY SEWER DESIGN PLANS MUST BE SIGNED AND SEALED BY NYS LICENSED PROFESSIONAL ENGINEER